

# The Economic Outlook for Facilities Projects and Investments JLL



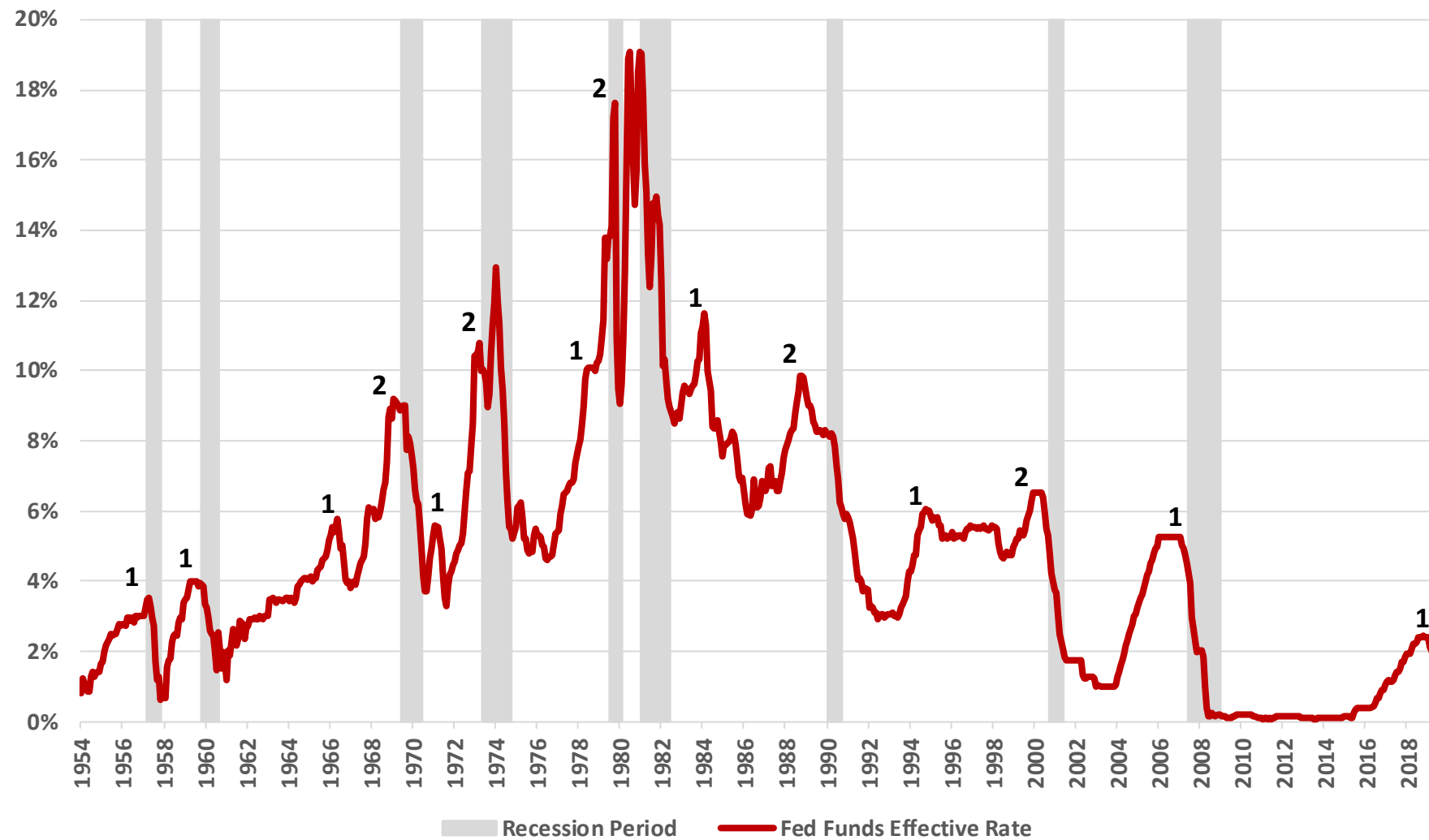
AAPA  
March 2020  
Walter Kemmsies

# Tailwinds with a bit of turbulence

- Recent economic growth has been anaemic due to impacts of trade agreement negotiation strategies and other factors creating an uncertain economic environment, compounded by the development of the Coronavirus pandemic
- Economic and trade (export) growth could pick up significantly in the back half of 2020 due to less uncertainty
- Volatility of the transition period is part of the process of adjusting to new policies

# Mid-cycle pause or recession?

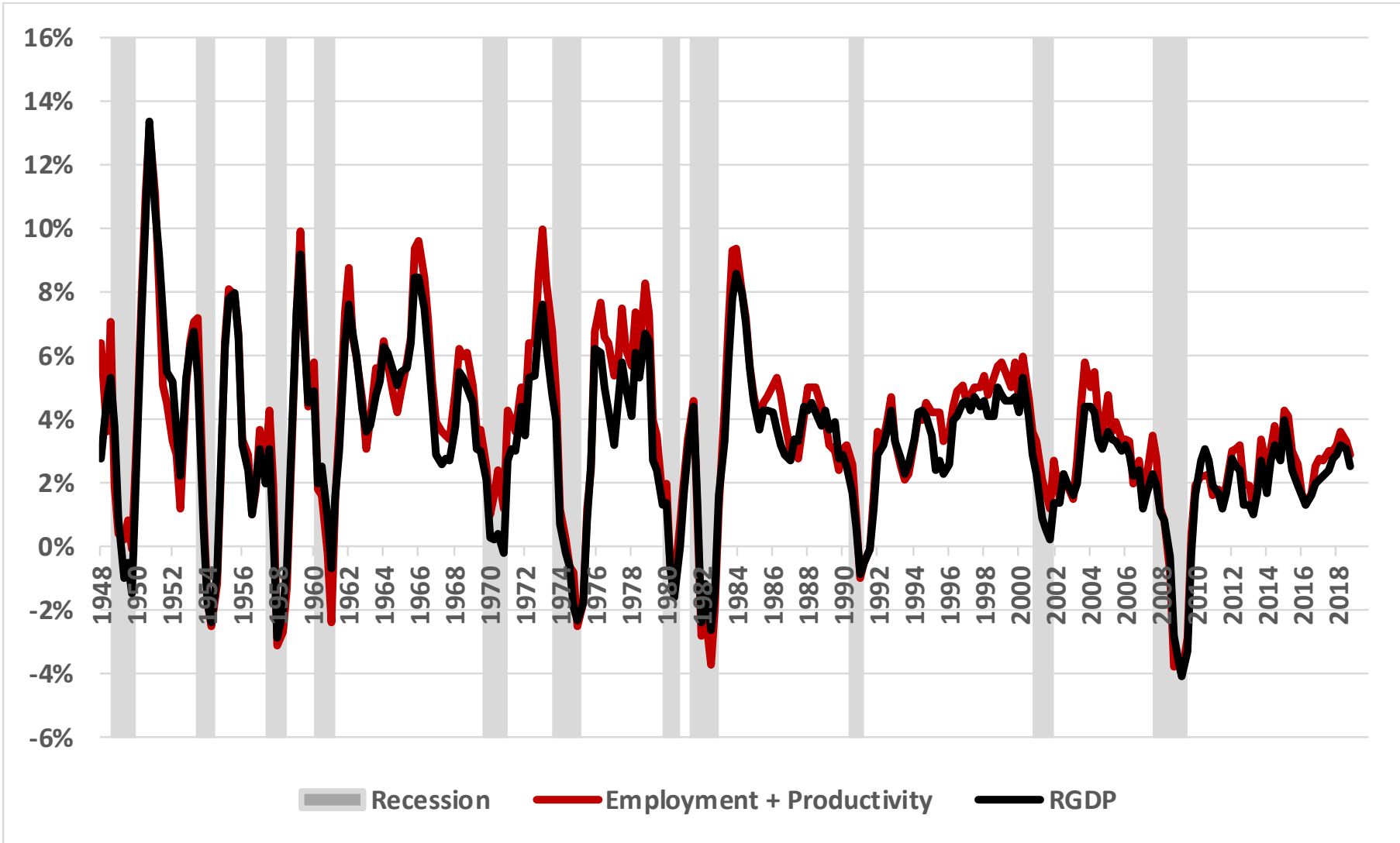
## Federal Funds Rate and Business Cycles



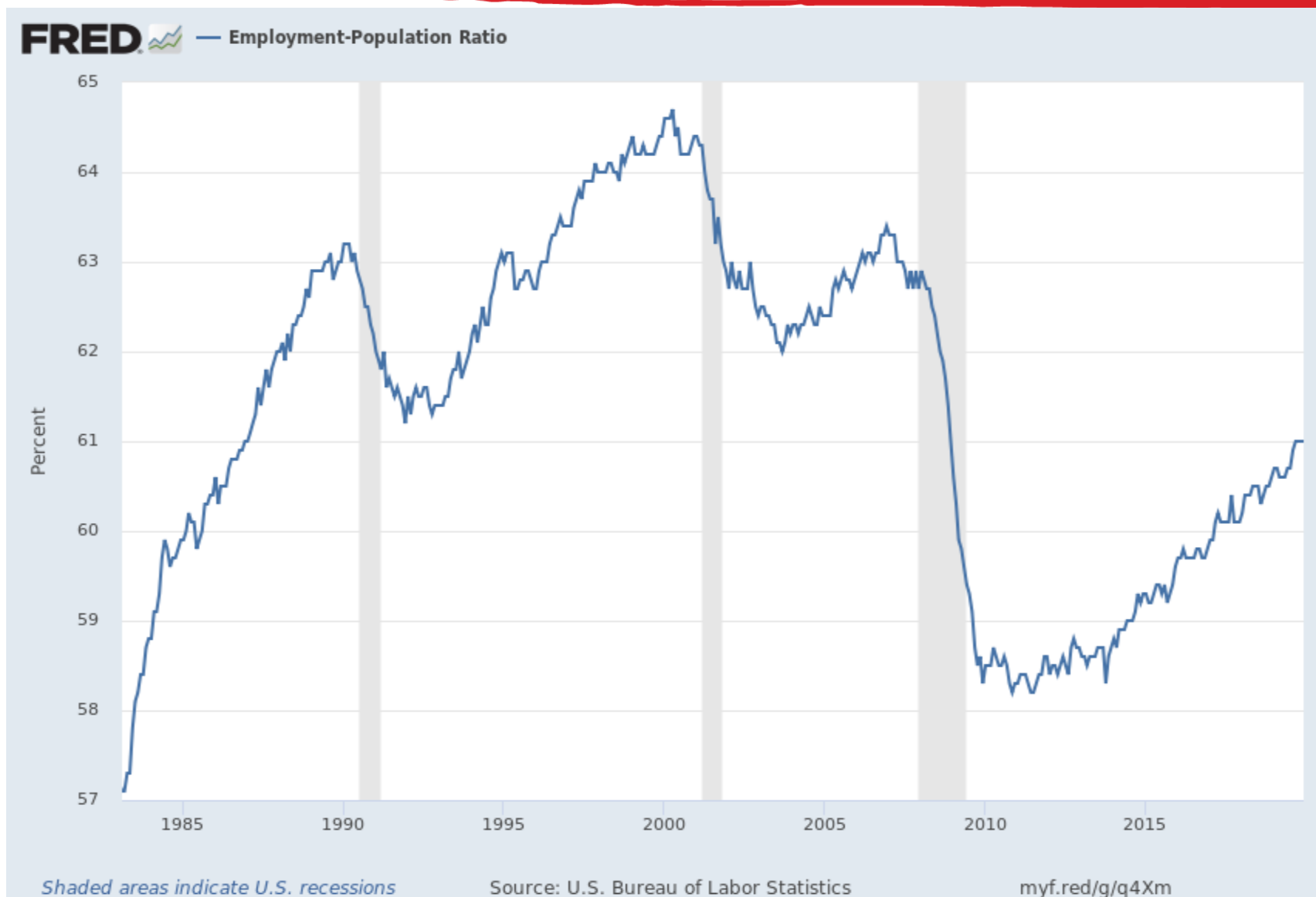


# US long term economic trends

REAL GDP GROWTH AND SUM OF DRIVERS' GROWTH

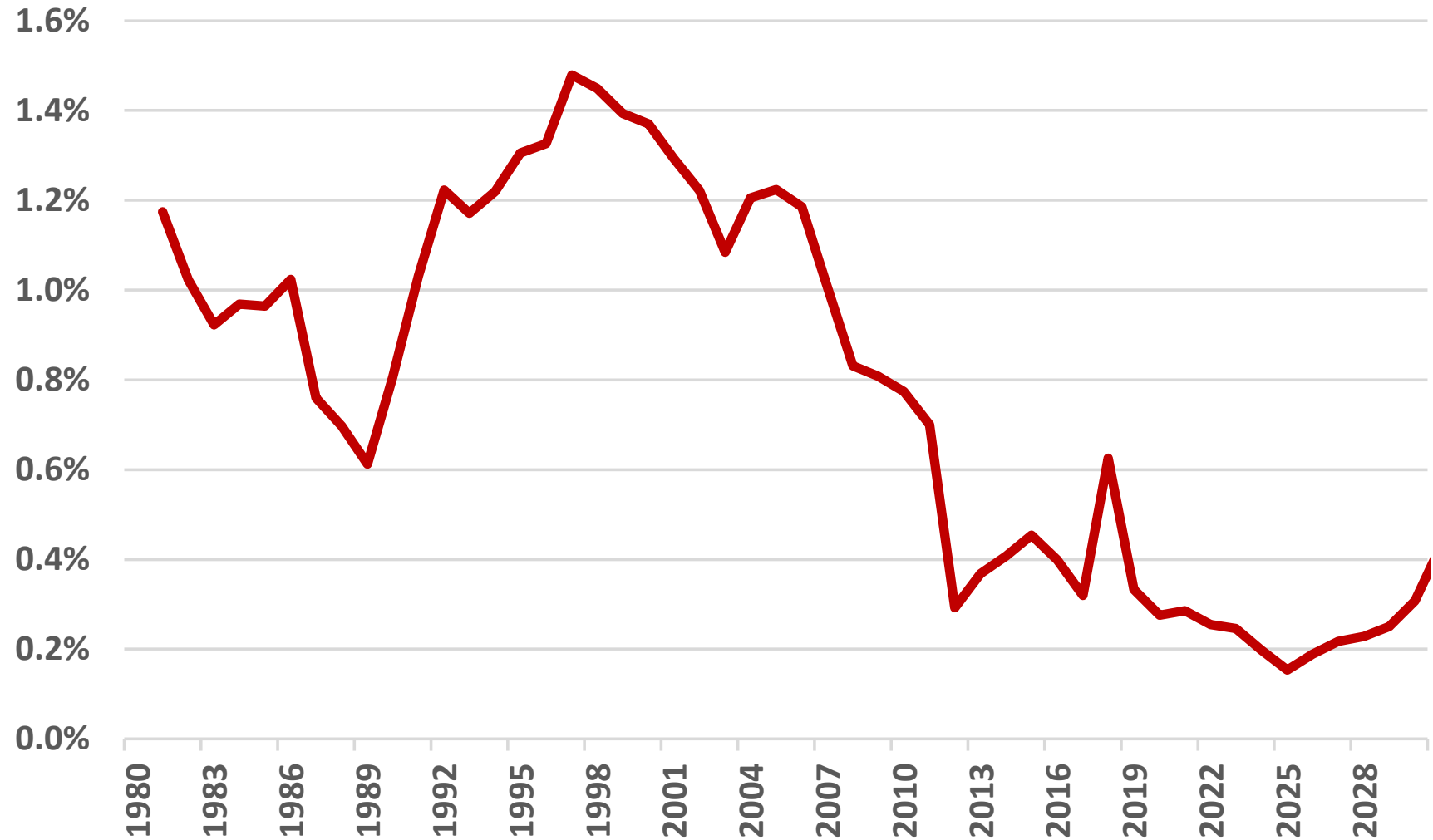


# Labor force participation is not yet back at historical peak levels

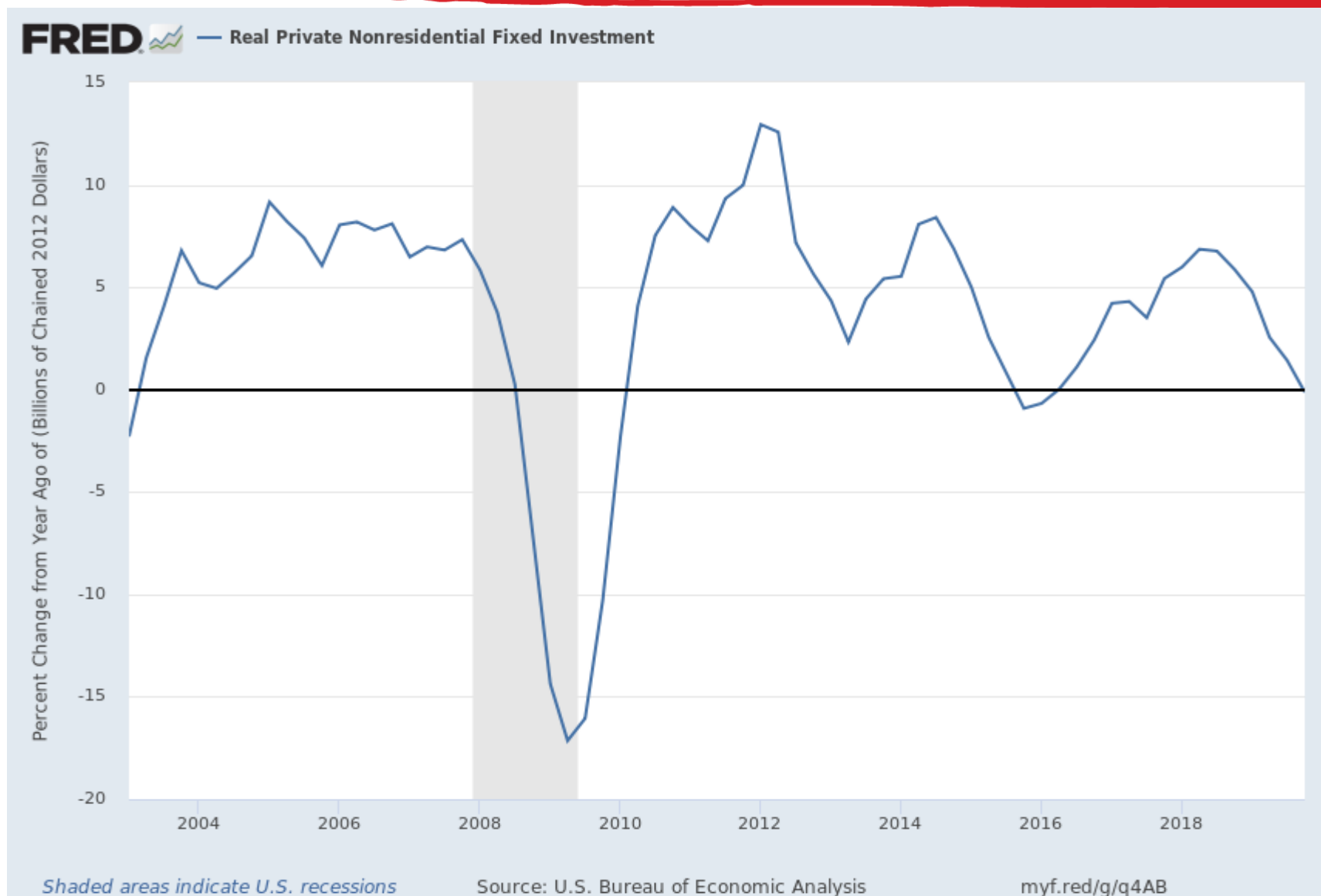


# US working age population growth

## Working Age Population Growth: Historical and Forecast



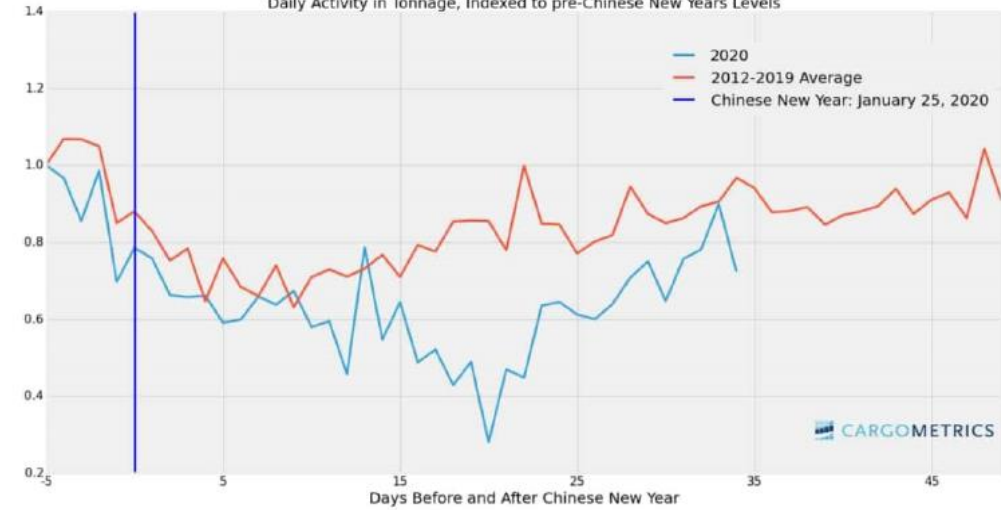
# Physical capital investment growth peaked in 2018



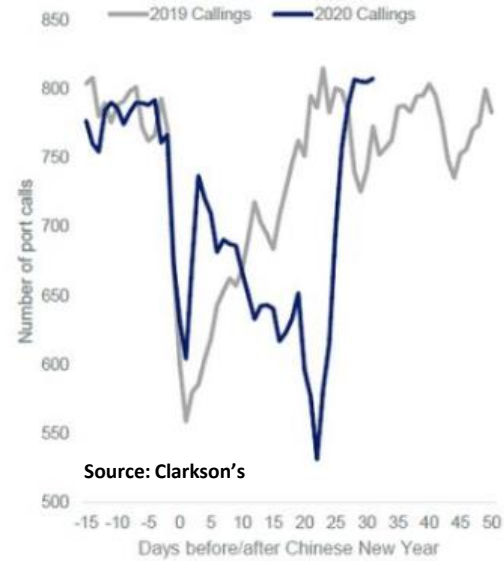
# Coronavirus impacts on Chinese port activity

**Chinese Seaborne Exports After Chinese New Year**

Daily Activity in Tonnage, Indexed to pre-Chinese New Years Levels

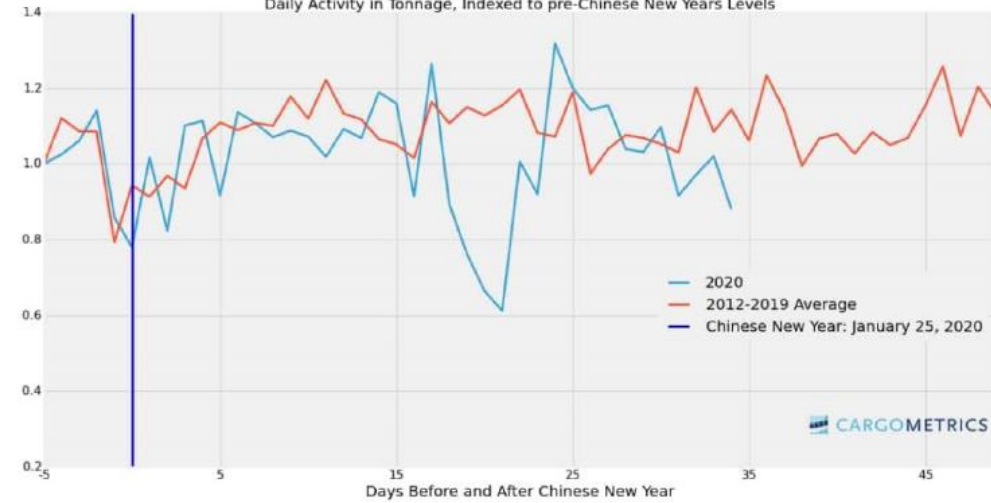


**Number of Chinese port calls**

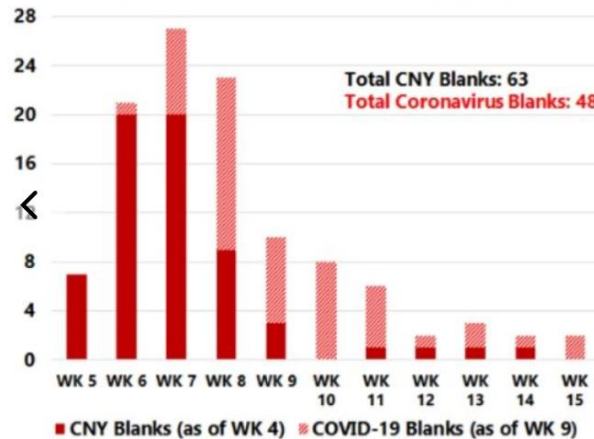


**Chinese Seaborne Imports After Chinese New Year**

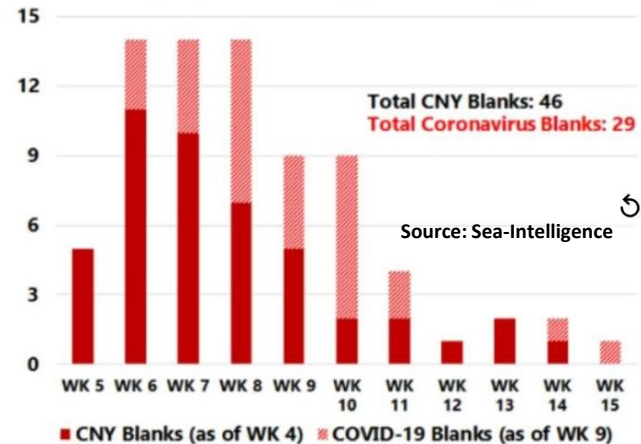
Daily Activity in Tonnage, Indexed to pre-Chinese New Years Levels



**Fig. 1: Blank Sailings (Transpacific)**



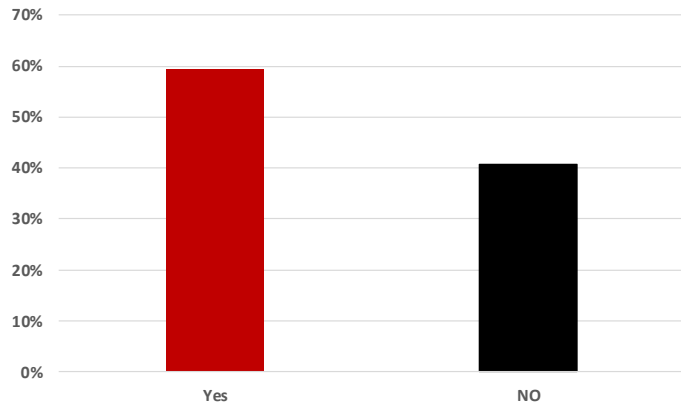
**Fig. 2: Blank Sailings (Asia-Europe)**



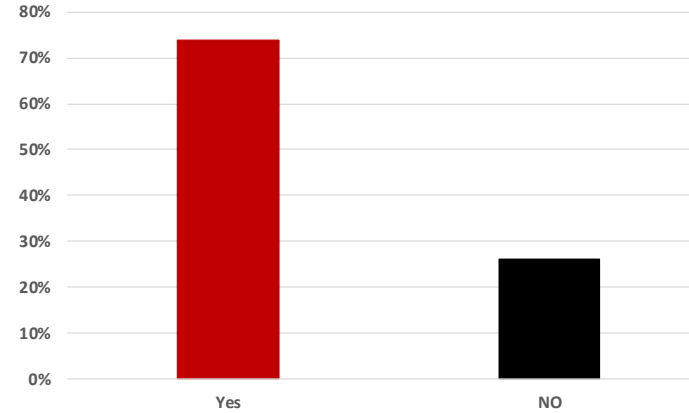


# Survey of Supply Chain Executives – January 2020

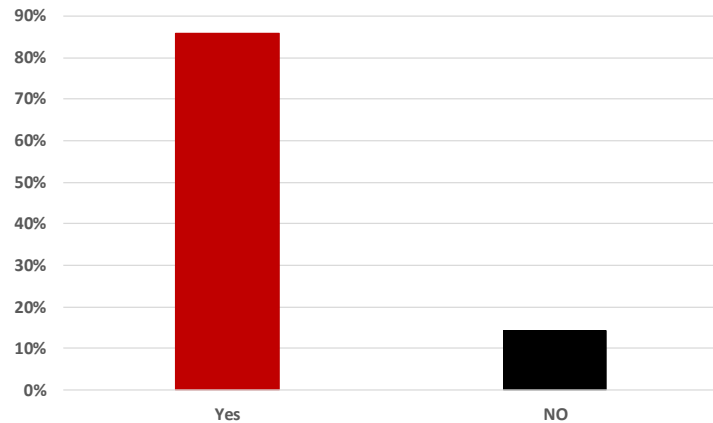
**HAS YOUR COMPANY CHANGED SOURCING TO ALTERNATIVE LOCATIONS FROM CHINA INCLUDING REPATRIATION OF OPERATIONS TO THE US?**



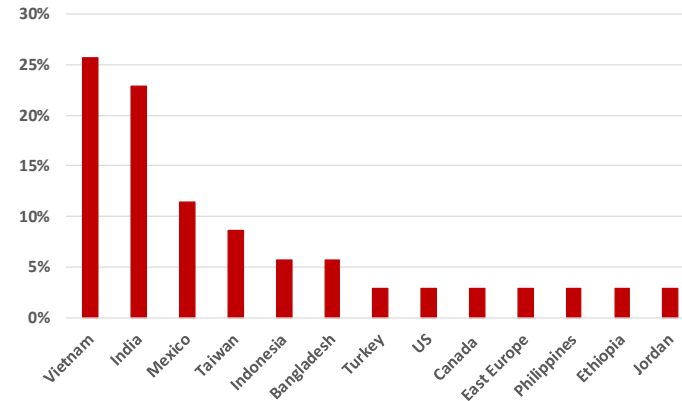
**IF YOU HAVE MANUFACTURERS SUPPLYING FROM CHINA, HAVE THEY MOVED TO ALTERNATIVE ORIGINS OF SUPPLY?**



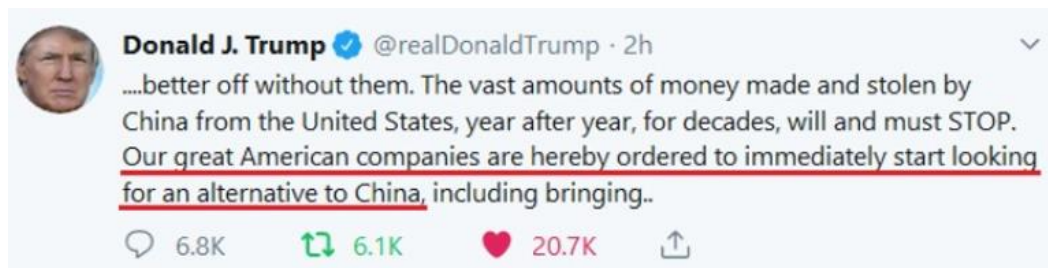
**IF TRADE WITH CHINA WERE STABILIZED OVER A LONGER PERIOD OF TIME, WOULD YOU STILL DIVERSIFY YOUR SOURCING?**



**IF YOU ANSWERED YES TO ANY OF THE 3 EARLIER QUESTIONS, WHAT ALTERNATIVE SOURCING LOCATIONS HAVE YOU CHOSEN?**



# China's share of US containerized volumes peaked in 2018



## US CONTAINERIZED IMPORT VOLUMES: 2018 AND 2019

Country	2018 Share	2019 Share	Share Change
China	37%	33%	-4.5%
Europe	19%	20%	0.5%
India	4%	5%	0.6%
Brazil	3%	3%	0.0%
Vietnam	3%	4%	1.0%
Korea, South	3%	3%	0.2%
Thailand	3%	3%	0.3%
Taiwan	2%	3%	0.2%
Turkey	2%	2%	0.2%
Colombia	1%	2%	0.3%
Malaysia	1%	2%	0.4%
Mexico	1%	1%	0.1%
Guatemala	1%	1%	0.3%
Canada	1%	1%	0.2%

	World Total Import Growth	World Total Export Growth	World Containerized Import Growth	World Containerized Export Growth
<b>2017</b>	1.4%	15.3%	4.6%	9.5%
<b>2018</b>	-2.7%	11.8%	4.8%	8.5%
<b>2019</b>	-6.3%	0.1%	1.3%	-0.8%

	China Total Import Growth	China Total Export Growth	China Containerized Import Growth	China Containerized Export Growth
<b>2017</b>	5.9%	8.6%	6.4%	5.9%
<b>2018</b>	6.5%	-36.4%	7.8%	-16.4%
<b>2019</b>	-12.2%	-13.9%	-10.4%	-20.0%

	China Total Import Share	China Total Export Share	China Containerized Import Share	China Containerized Export Share
<b>2017</b>	10.0%	14.8%	35.9%	24.5%
<b>2018</b>	10.9%	8.4%	37.0%	18.9%
<b>2019</b>	10.2%	7.2%	32.7%	15.3%

# US East Coast ports have better global connectivity

## COUNTRY SHARE OF US CONTAINERIZED VOLUMES (METRIC TONS)

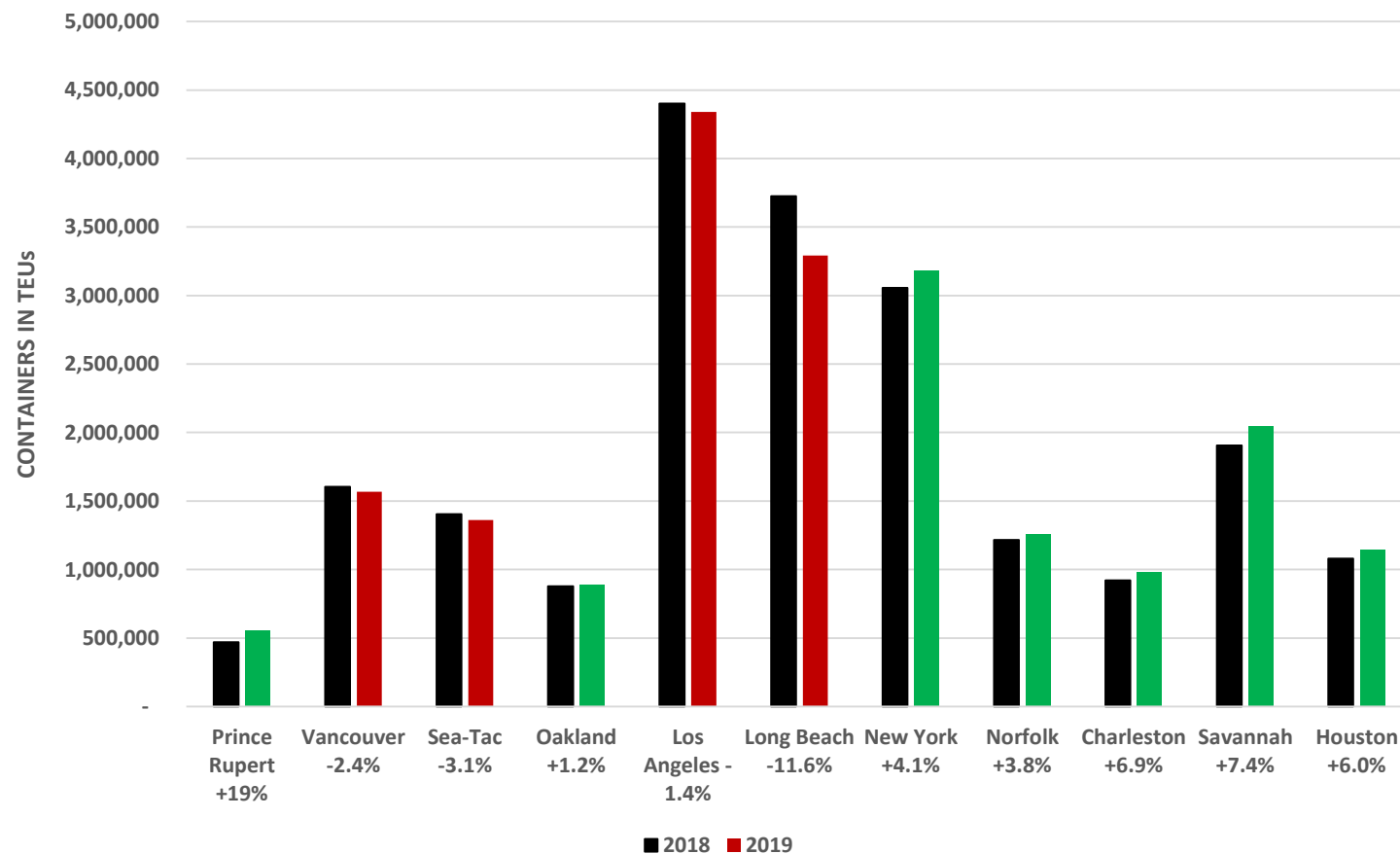
Color Key = East Coast West Coast Gulf Coast

PORT	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Global Rank Out of 960
New York/New Jersey	36.1	35.8	33.4	36.0	39.2	39.8	41.6	40.8	40.5	41.4	40.7	39.1	48.5	49.9	36
Savannah	33.2	32.3	31.8	32.5	33.5	39.1	39.7	39.6	40.2	39.7	39.4	45.3	48.6	49.8	37
Charleston	28.1	27.2	26.3	23.3	29.0	29.9	31.2	30.7	31.4	32.5	32.5	38.3	42.2	43.1	61
Oakland	34.6	33.5	34.6	33.8	33.6	38.5	38.4	39.5	41.7	37.9	44.2	44.5	44.7	43.0	63
Norfolk	33.1	31.9	29.3	29.2	31.2	32.8	34.4	33.5	34.1	35.4	35.3	41.0	41.3	42.6	64
Los Angeles	33.3	33.5	30.0	31.6	30.2	31.2	34.2	35.6	38.7	41.5	41.6	42.4	42.3	42.0	66
Houston	35.4	34.7	33.6	33.0	32.8	37.5	36.8	36.2	37.1	37.1	36.6	35.8	36.3	39.6	71
Long Beach	31.6	28.9	31.1	28.1	27.2	33.4	32.0	32.0	33.2	33.8	36.4	37.9	35.7	37.1	79
Philadelphia	15.9	13.7	14.1	13.7	14.7	19.5	15.5	16.0	18.0	18.7	20.6	28.5	31.5	32.5	102
New Orleans	26.0	26.2	23.6	21.0	24.2	27.0	27.4	28.0	27.9	27.9	27.7	30.1	31.6	32.1	104
Seattle	24.2	25.3	24.4	24.9	26.2	27.9	26.3	25.0	27.0	24.6	27.3	29.5	34.4	30.5	115
Jacksonville	19.7	19.1	19.5	17.7	20.4	22.9	24.6	24.2	25.7	23.6	23.6	28.3	25.4	28.5	124
Miami	23.4	22.4	19.8	20.2	20.4	21.9	21.8	24.1	24.8	27.7	27.8	27.3	30.8	27.5	130
Baltimore	19.2	18.1	18.5	18.9	26.3	26.2	27.1	26.6	27.0	28.5	27.9	26.2	27.5	27.5	132
Port Everglades	25.2	24.8	24.2	23.2	24.6	26.3	24.8	24.4	25.9	29.6	24.9	25.9	24.0	26.8	140
Wilmington (NC)	10.4	10.9	12.1	11.3	10.9	12.6	10.9	11.4	12.6	12.8	13.7	23.5	23.9	26.2	142
Tacoma	19.6	21.7	22.1	23.8	18.2	18.0	21.3	24.6	25.8	25.3	27.1	19.8	22.7	24.4	158
Boston	10.2	10.1	9.6	10.8	11.7	17.0	14.7	13.3	14.1	15.4	15.8	21.0	20.4	21.7	177
Mobile	7.9	7.8	8.7	14.2	12.3	16.8	15.0	17.8	17.3	17.4	18.4	20.7	20.0	21.3	180
Tampa	4.0	8.3	7.2	7.4	8.1	5.9	5.3	8.5	9.1	7.6	7.7	8.0	9.0	19.8	187

East Coast ports and railroads are more likely to gain from a shift of import sourcing away from China

# Recent imported container trends

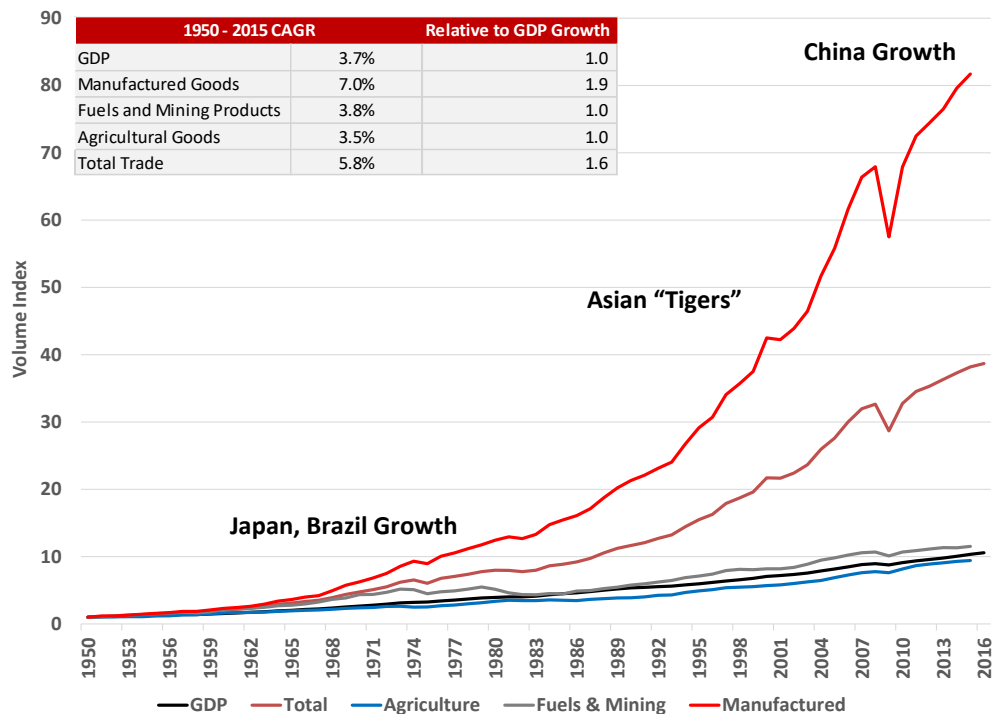
## 2019 COMPARED TO 2018 FOR SELECT PORTS



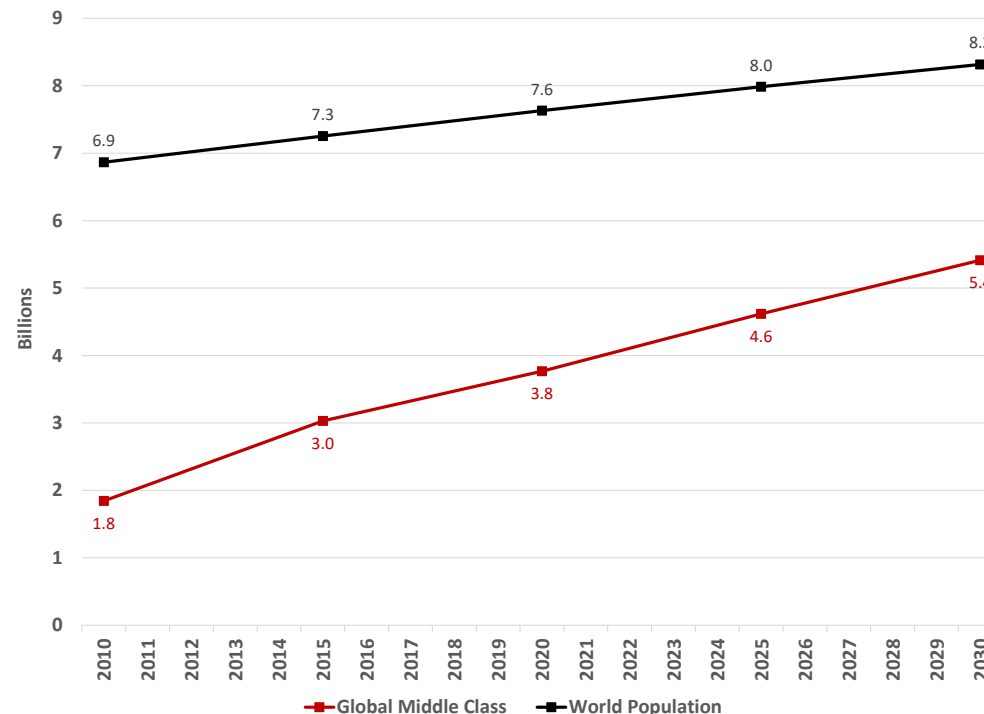
Imported container volumes for the East Coast ports shown here grew 5.3% while West Coast imported volumes declined 3.8%

# World trade created the largest global middle class ever

## World Real GDP and Trade Volume Indexes 1950-2018E



## World Population and OECD Global Middle Class Estimates



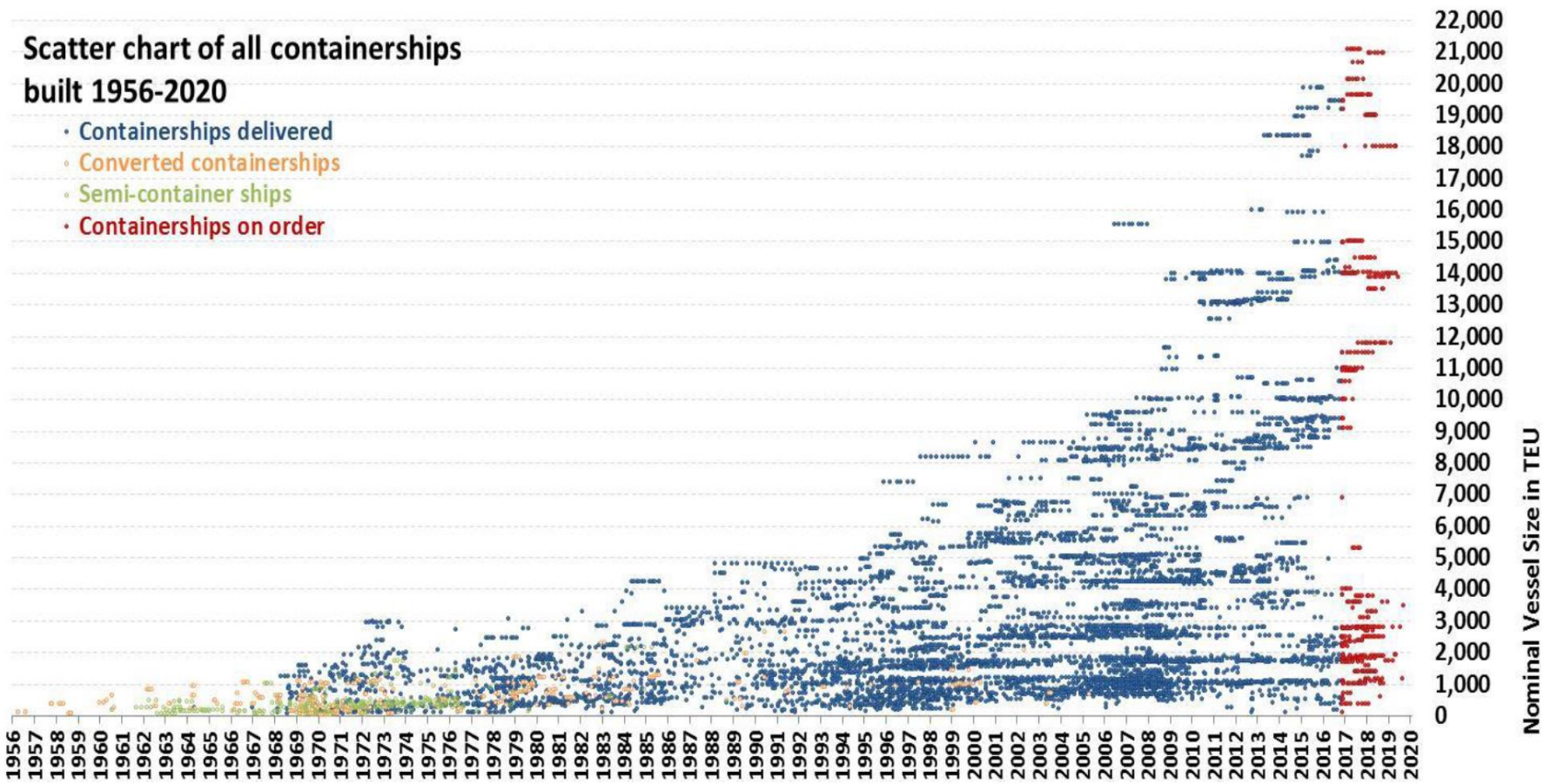
Drivers of trade: unequal distribution of resources, trade agreements/tariffs, infrastructure, communication/information technology

Opening the world markets facilitated more manufacturing jobs in developing countries, allowing for the creation of the global middle class



# More trade means greater deployment of larger vessels is feasible

## EVOLUTION OF CONTAINERSHIP SIZE



## Race to build larger ships

- Few innovations in industry apart from building larger ships



# Bigger ships, congestion, trains and industrial real estate



14,000 TEU Vessel 95% Full =  
14,778 lifts to unload and load



77% moved by truck = 11,379 one-  
way truck trips = 131 miles of  
trucks end-to-end



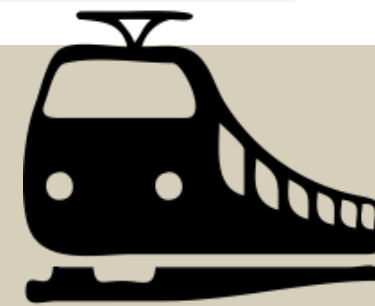
23% moved by rail = 10 unit trains  
= 20 miles of trains end-to-end



768K (import and export)  
TEUs per year requires  
20M to 60M sf of DC space

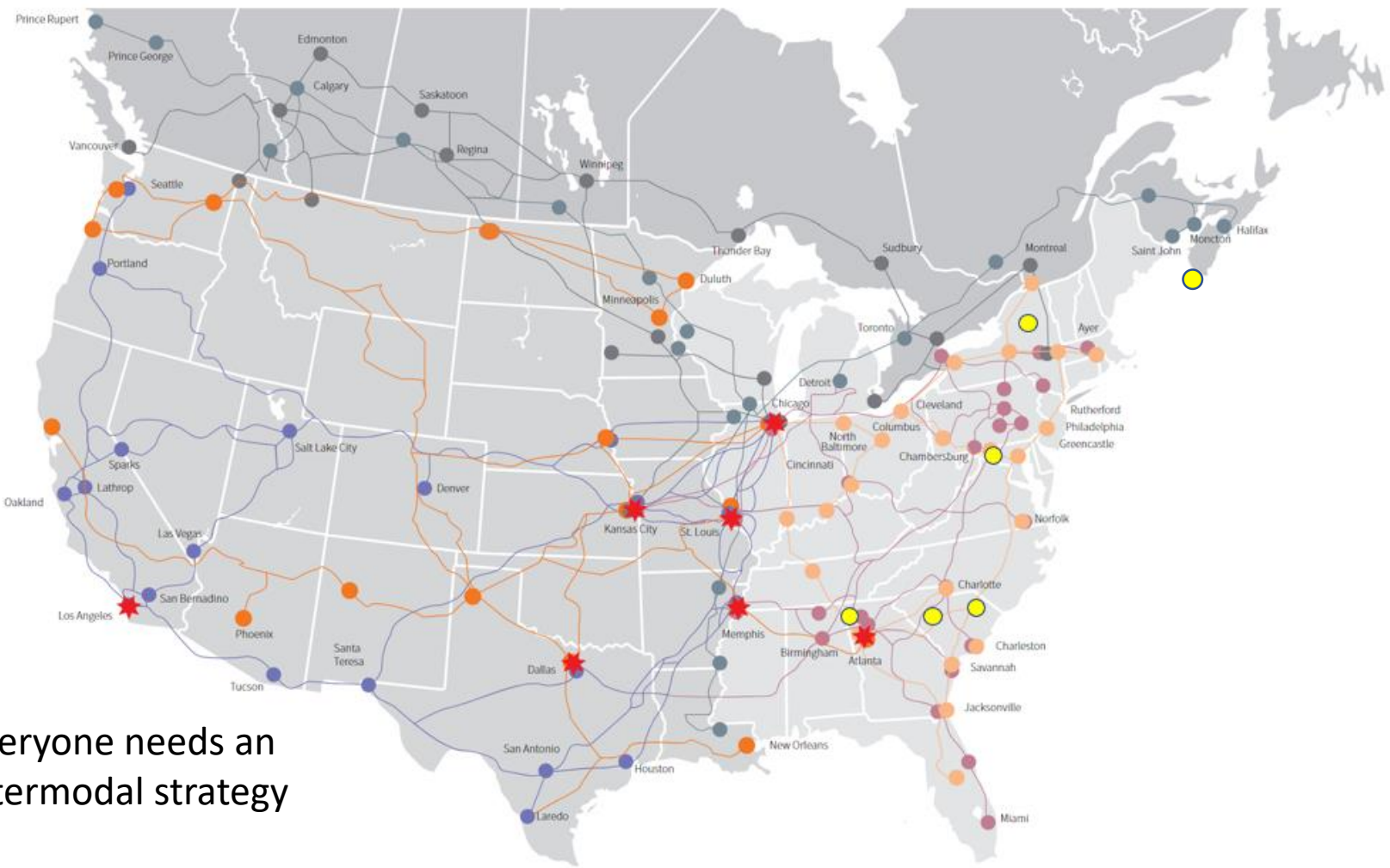
## Average Intermodal Shares of Various Ports (2018)

Los Angeles / Long Beach **40%** | New York **25%** | Savannah **18%** | Norfolk **35%**





# Inland hubs are becoming more numerous in the US

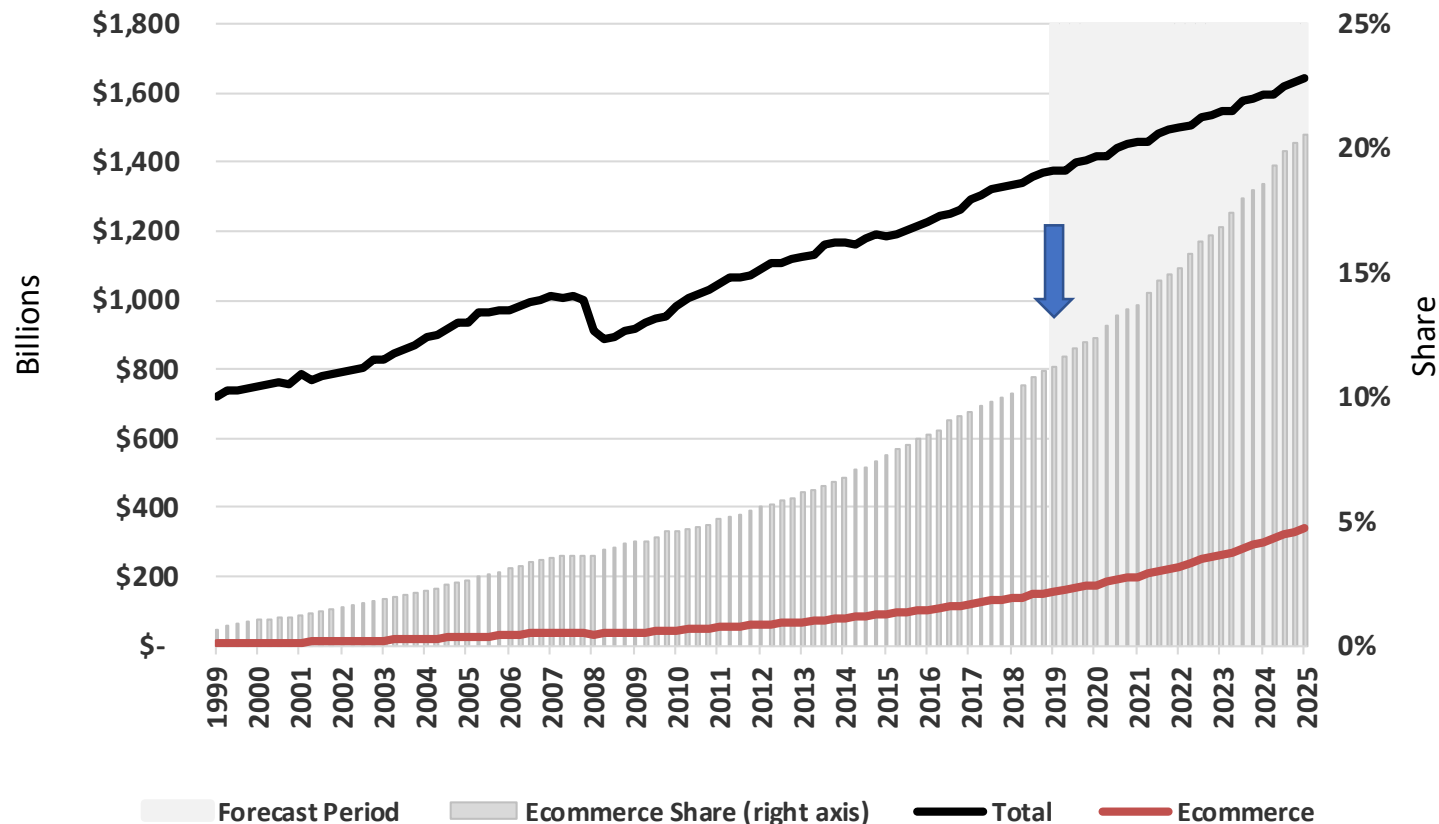


Everyone needs an intermodal strategy

- Canadian Pacific
- Union Pacific
- Norfolk Southern
- Canadian National
- BNSF
- CSX
- ★ Inland Port Rail Hub
- Port Authority inland ports

# E-commerce Trends

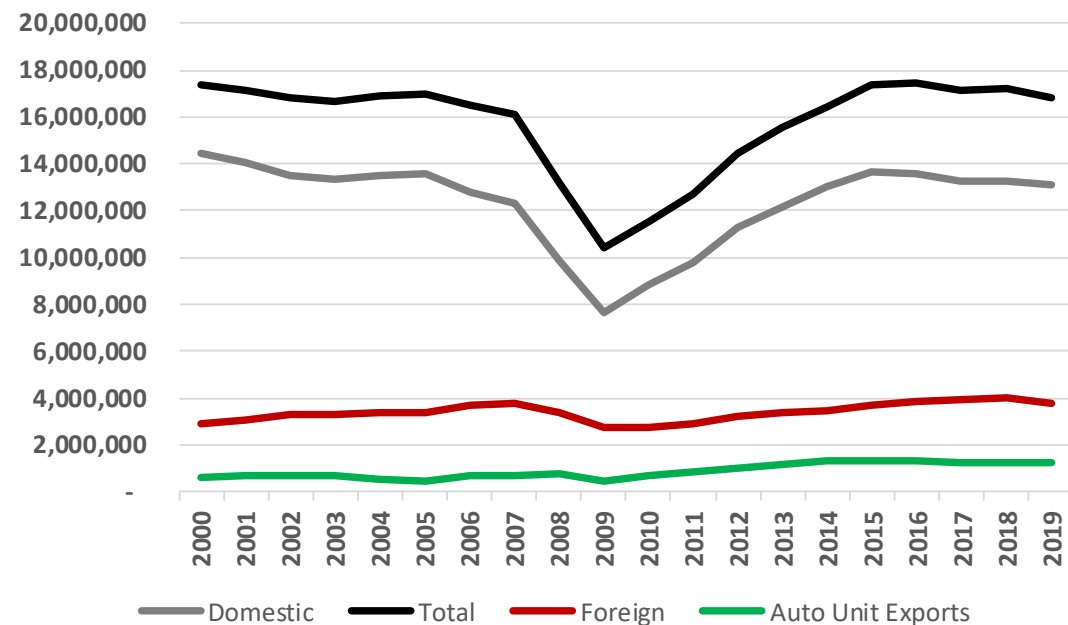
## RETAIL SALES (EXCLUDING GASOLINE AND AUTOS) TOTAL AND VIA E-COMMERCE AND E-COMMERCE



This chart shows retail sales excluding gasoline and automobiles from 1999 to 2019 Q3  
 Consensus view is that the e-commerce share increases from ~10% in 2019 to 20% by 2025

# Private vehicle sales and international trade trends

## US AUTO AND LIGHT TRUCK SALES: 2000 - 2019



With slow growing population and lower GDP growth, as well as a shift towards electric vehicles that last longer than internal combustion engine vehicles, it is more likely that US vehicle sales will decline from the current 16 to 17 million units per year level. The shift to electric vehicles is expected to slowly replace the current US vehicle fleet



# Summing up

- Recent economic growth has been anaemic – a negative GDP growth quarter or two could happen in 2020
- Economic and trade (export) growth likely to pick up significantly in the back half of 2020
- Expect a volatile adjustment to new policies